

IN THE CLAIMS:

For the Examiner's convenience, the following is a complete listing of claims in the present application:

1. – 27. (cancelled).

28. (previously presented) A data communication apparatus which transfers object data to a destination node, said data communication apparatus comprising:

a control unit adapted (a) to determine a segment size and a segment data size in accordance with a size of a receiving buffer of the destination node, the size of the receiving buffer being determined by the destination node in accordance with a maximum payload size that can be received by the destination node, (b) to divide the object data into segments in accordance with the segment size, and (c) to divide each segment into a plurality of segment data in accordance with the segment data size; and

a data communication unit adapted (a) to generate packets from the plurality of segment data, and (b) to transfer the packets from said data communication apparatus to the destination node via a logical connection set between said data communication apparatus and the destination node, the logical connection being set by a controller.

29. – 42. (cancelled).

43. (previously presented) A data communication apparatus according to claim 28,
wherein said data communication apparatus is adapted to obtain connection information
indicating the logical connection from the controller, and

wherein the packets generated by said data communication unit include
the connection information.

44. – 45. (cancelled).

46. (previously presented) A data communication apparatus according to claim 28,
wherein the segment size of each segment is variable.

47. (cancelled).

48. (previously presented) A data communication apparatus according to claim 28,
wherein said data communication unit is adapted to transfer the packets via a serial bus
conformed to IEEE 1394-1995 standard.

49. (previously presented) A data communication apparatus according to claim 28,
wherein the object data includes image data.